

AA SCREENING REPORT

Dunboyne Link Road

Meath County Council

PROJECT NO. M1346/1

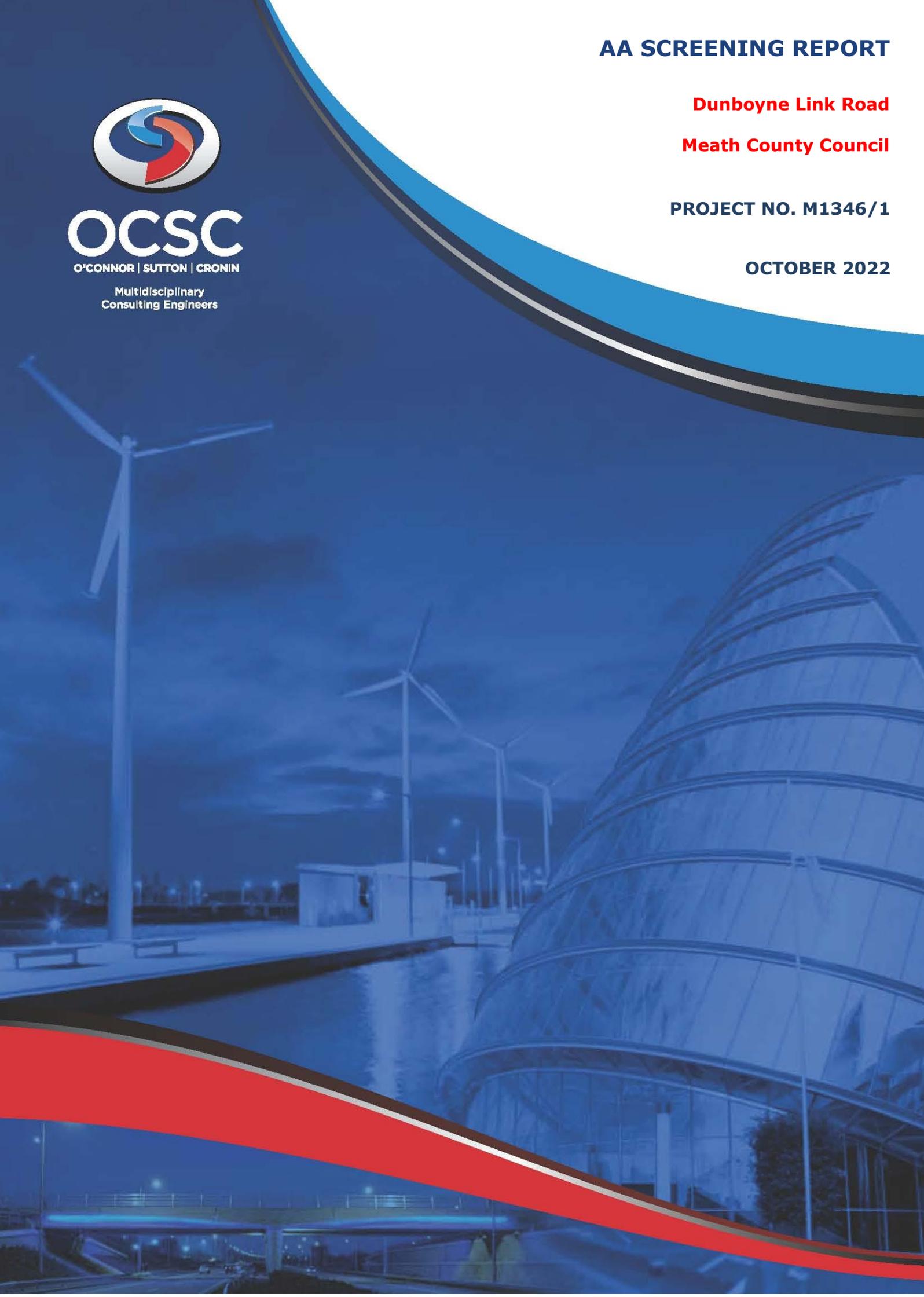
OCTOBER 2022



OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary
Consulting Engineers



AA SCREENING REPORT

Dunboyne Link Road

Meath County Council

PROJECT NO. M1346/1

OCTOBER 2022

APPROPRIATE ASSESSMENT SCREENING REPORT

Dunboyne Link Road

for

Meath County Council



OCSC

O'CONNOR | SUTTON | CRONIN

Multidisciplinary
Consulting Engineers

NOTICE

This document has been produced by O'Connor Sutton Cronin & Associates for its client, Meath County Council. It may not be used for any purpose other than that specified by any other person without the written permission of the authors.



DOCUMENT CONTROL & HISTORY

OCSC Job No.: M1346/1	Project Code	Originator	Zone Volume	Level	File Type	Role Type	Number	Status / Suitability Code	Revision
	M1346/1	OCSC	ZZ	ZZ	RP	YE	800	S2	P1
Rev.	Status	Authors	Checked	Authorised	Issue Date				
P1	FINAL	L/EB	GB	EB	19.10.2022				
P0	DRAFT	L/EB	GB	EB	29.04.2022				

APPROPRIATE ASSESSMENT SCREENING REPORT

<u>TABLE OF CONTENTS</u>	<u>PAGE</u>
1 INTRODUCTION.....	1
1.1 Project Contractual Basis & Parties Involved	1
1.2 Legislative Context	1
1.3 Methodology and Approach	3
1.4 Scope of Works	3
1.5 Limitations.....	4
2 DESCRIPTION OF THE EXISTING ENVIRONMENT.....	5
2.1 Project Description.....	5
2.2 Site Location	5
2.3 Study area.....	6
2.4 Surrounding Land Use	7
2.5 Hydrology	7
3 SCREENING FOR APPROPRIATE ASSESSMENT	10
3.1 Screening Process.....	10
3.2 Identification of relevant European Sites	10
3.3 Assessment Criteria.....	16
3.3.1 Exclusion from Appropriate Assessment	16
3.3.2 Elements of the Works with the Potential to Give Risk of Effects	16
3.3.3 Identification of Potential Effects and Screening of Sites	16

3.4	Assessment of Significance of Potential Effects	17
3.4.1	Land Take/Habitat Loss.....	18
3.4.2	Resource Requirements.....	18
3.4.3	Duration of Works	18
3.4.4	Emissions (Disposal to Land, Water or Air).....	18
3.4.5	Excavation Requirements/ Erosion/Sedimentation.....	19
3.4.6	Transportation Requirements.....	19
3.4.7	Duration of Construction, Operation, Decommissioning	19
3.4.8	Habitat Reduction	19
3.4.9	Species Disturbance.....	19
3.4.10	Habitat or Species Fragmentation	20
3.4.11	Changes in Key indicators of Conservation Value.....	20
3.4.12	Climate Change.....	20
4	SUMMARY & CONCLUSION	22
4.1	Summary	22
4.2	Conclusion	22

1 INTRODUCTION

1.1 Project Contractual Basis & Parties Involved

This report has been prepared by O'Connor Sutton Cronin & Associates Ltd. (OCSC) at the request of their Client, Meath County Council. The proposed development includes a link road that shall be approximately 340m in length and a new access road that shall be approximately 50m in length, the scheme will also include junctions, footpaths, bus stops, public lighting, accommodation and fencing/boundary works, landscaping works, drainage/attenuation works, and ancillary infrastructure and utility works. The scheme is to serve as a connection between the Dunboyne Business Park and the R157.

The report was completed by Luis lemma BSc, MSc, Ph.D, Senior OCSC Ecologist; assisted by Eadaoin Butler BSc in Ecology, OCSC Ecologist; reviewed by Glenda Barry, BSc, MSc, Principal Environmental Consultant; and approved by Eleanor Burke BSc, MSc, DAS, MEnvSc, CSci, Technical Principal, and the OCSC Environmental Division Manager.

1.2 Legislative Context

The Habitats Directive provides legal protection for habitats and species of European importance. The overall aim of the Habitats Directive is to maintain or restore the "favourable conservation status" of habitats and species of European Community Interest. These habitats and species are listed in the Habitats and Birds Directives (Habitats Directive as above and Directive 2009/147/EC on the conservation of wild birds) with Special Areas of Conservation (SACs) and Special Protection Areas (SPAs) designated to afford protection to the most vulnerable of them. These two designations are collectively known as European Sites. Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans and projects likely to affect such sites. Article 6(3) establishes the requirement for AA. These requirements are implemented in the Republic of Ireland by the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended) and the Planning Development Act 2000 (as amended).

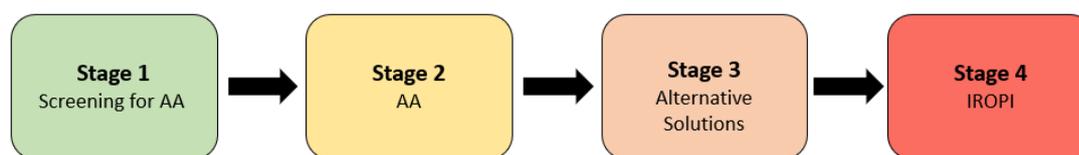
This AA screening is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted. This included a detailed review of the National Parks and Wildlife Service (NPWS) website, including mapping and available reports for relevant sites and in particular sensitive qualifying interests/ special conservation interests described and their conservation objectives. The EPA EnVision map viewer (EPA 2021) and available reports were also reviewed, as was the NPWS (2013) publication "*The Status of Protected EU Habitats and Species in Ireland*".

The ecological desktop study completed for the AA screening of the proposed development comprised of the following elements:

- Identification of European sites with 15 km of the proposed project boundary with identification of potential pathway links for specific sites (if relevant) greater than 15 km from the proposed project boundary;

- Review of the NPWS site synopses and conservation objectives for European sites within 15 km and for which potential pathways from the proposed site have been identified; and
- Examination of available information on protected species.

There are four main stages in the AA process as follows:



IROPI: imperative reasons of overriding public interest (IROPI),

Stage One: Screening

The process that identifies the likely impacts upon a European site of a project of plan, either alone or in combination with other projects or plans, and considers whether these impacts are likely to be significant.

Stage Two: Appropriate Assessment

The consideration of the impact on the integrity of the European site of the project of plan, either alone or in combination with other projects or plans, with respect to the site's structure and function and its conservation objectives. Additionally, where there are adverse impacts, an assessment of the potential mitigation of those impacts is undertaken. If adequate mitigation is proposed to ensure no significant adverse impacts on European sites, then the process may end at this stage. However, if the likelihood of significant impacts remains, then the process must proceed to Stage Three.

Stage Three: Assessment of Alternative Solutions

The process that examines alternative ways of achieving the objectives of the project or plan that avoids adverse impacts on the integrity of the European site.

Stage Four: Assessment where no alternative solutions exist and where adverse impacts remain

An assessment of compensatory measures where, in the light of an assessment of imperative reasons of overriding public interest (IROPI), it is deemed that the project of plan should proceed.

The Habitats Directive promotes a hierarchy of avoidance, mitigation, and compensatory measures. This approach aims to avoid any impacts on European sites by identifying possible impacts early in the plan or project making process and avoiding such impacts. Secondly, the approach involves the application of mitigation measures, if necessary, during the AA process to the point where no adverse impacts on the site(s) remain. If potential impacts on European sites remain and no further practicable mitigation is possible, the approach requires the consideration of alternative solutions. If no alternative solutions are identified and the plan or project is required for imperative reasons of overriding public interest, then compensation measures are required for any remaining adverse effects.

Ecological impact assessment of potential effects on European sites is conducted following a standard source-pathway-receptor model, where, in order for an effect to be established all three elements of this mechanism must be in place. The absence or removal of one of the elements of the mechanism is sufficient to conclude that a potential effect is of of any relevance or significance.

- Source(s) – e.g. pollutant run-off from proposed works;
- Pathway(s) – e.g. groundwater connecting to nearby qualifying wetland habitats; and
- Receptor(s) – qualifying aquatic habitats and species of European sites.

In relation to this report, receptors are the ecological features that are known to be utilised by the qualifying interests or special conservation interests of a European site. A source is any identifiable element of the proposed development that is known to interact with ecological processes. The pathways are any connections or links between the source and the receptor. This report provides information on whether direct, indirect, and/or cumulative adverse effects could arise from the proposed development.

1.3 Methodology and Approach

The AA Screening has been prepared taking into account legislation including the aforementioned legislation and guidance including the following:

- *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities*, Department of the Environment, Heritage and Local Government, 2009; 11 February 2010 revision.
- *Commission Notice: Managing Natura 2000 sites – The provisions of Article 6 of the Habitats' Directive 92/43/EEC*, European Commission, 2018.
- *Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC*, European Commission Environment DG, 2002.
- *Managing Natura 2000 sites: the Provisions of Article 6 of the Habitats Directive 92/43/EEC*, European Commission, 2000.

Using these documents, it has been possible to carry out a desktop AA Screening using the best available guidance and operating within the applicable legislation.

1.4 Scope of Works

To meet the project objectives, the following scope of works was completed:

- Present a discussion of the proposed development and its potential effects on its receiving environment;
- Present a discussion of the current site status and key environmental influences around the site;

- Undertake and present a review of European sites in the region of the proposed development;
- Conduct and present a discussion on the screening of the identified European sites in relation to the potential effects arising from the project; and
- Provide a conclusion as to whether the proposed development is likely to, either alone or in combination with other plans or projects, have a significant effect on any European site.

1.5 Limitations

This Appropriate Assessment Screening Report has been prepared for the sole use of Meath County Council (“the Client”). No other warranty, expressed or implied, is made as to the professional advice included in this report or any other services provided by OCSC.

This assessment is based on a review of available historical information, environmental records, consultations, relevant guidance information, and reports from third parties. All information received has been taken in good faith as being true and representative.

This report has been prepared in line with best industry standards. The methodology adopted and the sources of information used by OCSC in providing its services are outlined in this Report. The assessment undertaken by OCSC and described was conducted in April 2022 and is based on the information available during that period. The scope of this Report and the services are accordingly factually limited by these circumstances.

OCSC disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report which may come or be brought to OCSC’s attention after the date of the Report.

The conclusions presented in this report represent OCSC’s best professional judgement based on review of the relevant information available at the time of writing. The opinions and conclusions presented are valid only to the extent that the information provided was accurate and complete.

2 DESCRIPTION OF THE EXISTING ENVIRONMENT

2.1 Project Description

This Appropriate Assessment (AA) Screening report has been prepared to assess the proposed road which will connect Dunboyne Business Park and the R157 in Dunboyne. The proposed development will consist of:

- The provision of a new Link Road (approximately 340m long), from the existing Dunboyne Business Park Road to a new priority junction on the R157.
- The provision of a new Access Road (approximately 50m long), to provide access to the Recycling Facility and Civic Amenity Centre, and other adjacent landholdings.
- Provision of footpaths and raised cycle tracks on both sides of the proposed Link Road.
- Provision of a footpath on the eastern side of the proposed Access Road.
- Priority junction implementation between the proposed Link Road and the R157.
- Priority junction implementation between the proposed Link Road and proposed Access Road.
- Provision of off-line bus stops on both sides of the proposed Link Road.
- Public lighting, accommodation and fencing/boundary works, landscaping works, drainage/attenuation works, and ancillary infrastructure and utility works.

2.2 Site Location

The site is located north of Dunboyne town, as shown in Figure 2.1. The site is on agricultural land and has residential premises to the south and Dunboyne Business Park to the east.

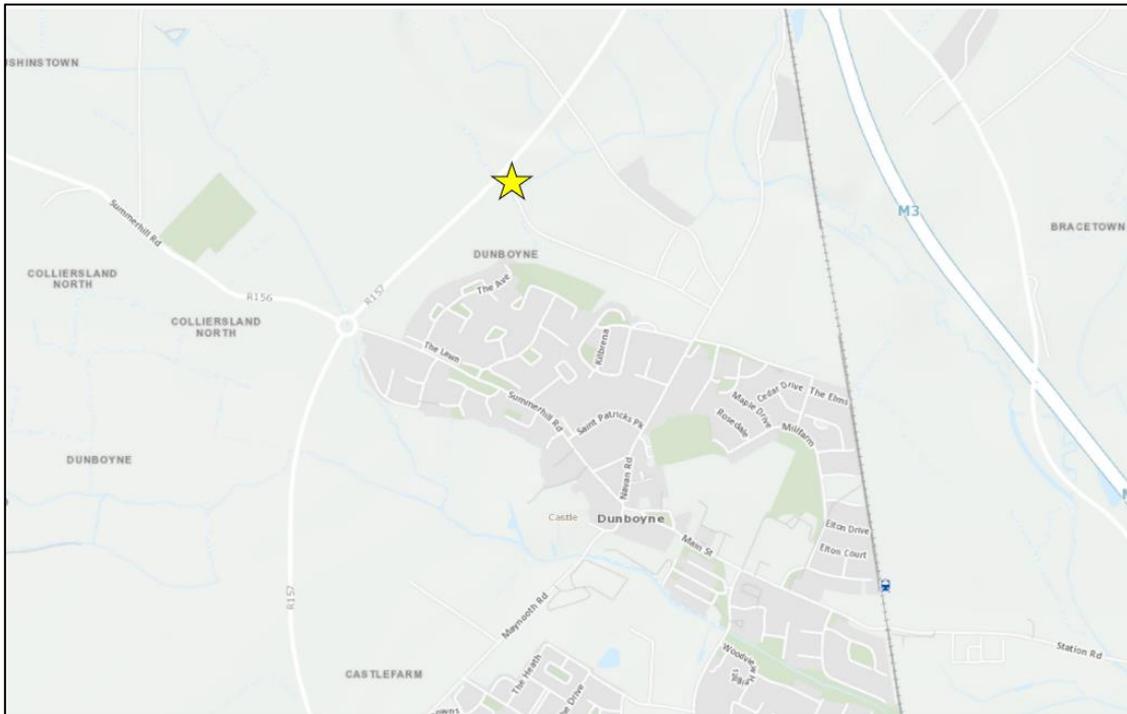


Figure 2.1: Approximate Site Location in yellow (Source: OSI, 2022).

2.3 Study area

The study area is located between Dunboyme Business Park to the east and the R157 to the west. An aerial photograph of the site and its immediate vicinity is shown in Figure 2.2.



Figure 2.2: Study Area (Source: EPA, 2022).

2.4 Surrounding Land Use

The immediate surrounding area to the proposed site is primarily agricultural with a mix of residential housing and business properties. Refer to Table 2.1 for a full list of adjacent land uses.

Table 2.1 – Adjacent Land Uses

BOUNDARY	LAND USE
North	Agricultural land; commercial, industrial including a recycling facility, and educational premises; and the R157
South	Residential premises, agricultural land, and the R157
East	Agricultural land, residential properties, and the Navan Road
West	Agricultural land

2.5 Hydrology

There are no surface water features mapped within the site area. Bennetstown stream, which is a tributary of the Tolka River (IE_EA_09T010600), is located adjacent to the site boundary as shown by Figure 2.3. Bennetstown stream (Segment code 09_385) flows into Naulwood (Segment Code 09_1422) which in turn flows into the Tolka River (IE_EA_09T010600). At the nearest point, the Tolka River is located 386m north of the proposed link road. The Tolka River flows into the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024) located greater than 18km downstream.

Dunboyne Stream (IE_EA_09D040500) is located approximately 434m southwest of the proposed link road. The Dunboyne Stream flows from west to southeast through Dunboyne town and discharges into the Tolka River approximately 2.37km southeast of the site.

Based on the most recent water quality information 2013-2018, the Tolka River and its tributaries, including the ones mentioned above, have an overall Water Framework Directive (WFD) risk classification of 'At Risk' as shown in Figure 2.3. The EPA spatial dataset shows that the WFD River Waterbody status of the Tolka River and the Dunboyne Stream are poor and moderate, respectively as shown in Figure 2.4. WFD summary information is included in Table 2.2

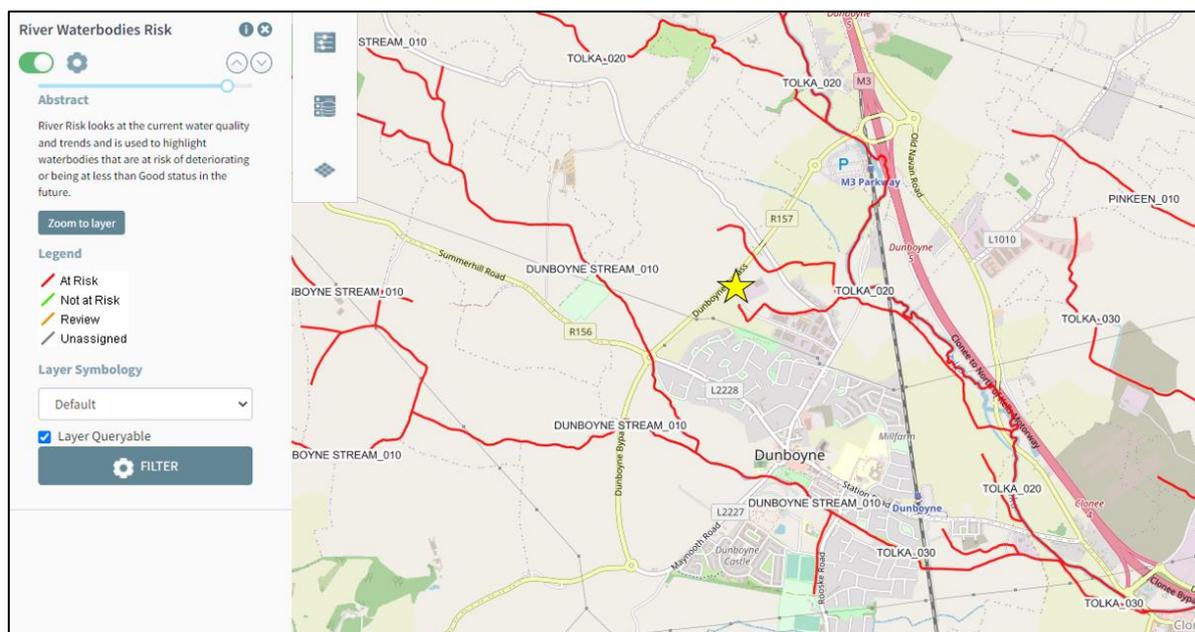


Figure 2.3: River Waterbody WFD Risk (approximate site location indicated by the yellow star) (Source: EPA, 2022).

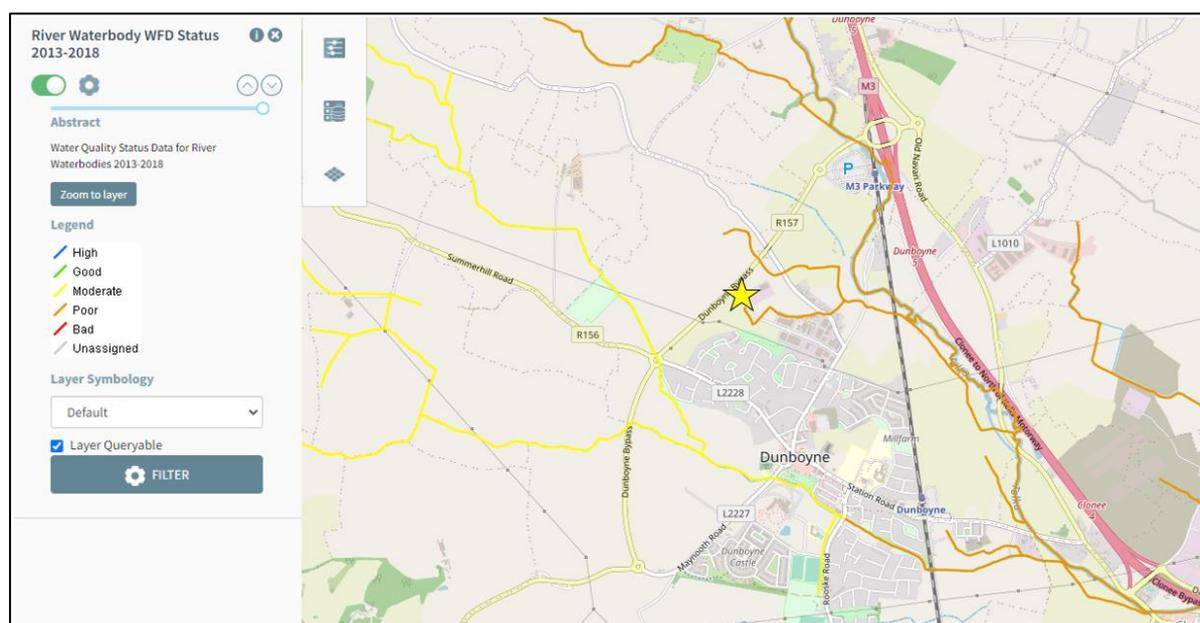


Figure 2.4: River Waterbodies Status (approximate site location indicated by the yellow star) (Source: EPA, 2022).

Table 2.2 - WFD Summary Information – Tolka River and Dunboyne Stream

Waterbody Code	IE_EA_09T010800	IE_EA_09D040500
Waterbody Name	Tolka River	Dunboyne Stream
Waterbody Type	River	River

Iteration	SW 2013-2018	SW 2013-2018
Status	Poor	Moderate
Risk	At Risk	At Risk

3 SCREENING FOR APPROPRIATE ASSESSMENT

3.1 Screening Process

This stage of the process identifies any likely significant effects to European sites from the proposed project, either alone or in combination with other projects or plans. The screening phase was progressed in stages during which a series of questions are asked to determine:

- Whether a proposed project can be excluded from AA requirements because it is directly connected with or necessary to the management of a European Site.
- Whether the proposed project will have a potentially significant effect on a European Site, either alone or in combination with other projects or plans, in view of the site's conservation objectives or if residual uncertainty exists regarding potential impacts.

An important element of the AA process is the identification of the “conservation objectives”, “Qualifying Interests” (QIs), and/ or “Special Conservation Interests” (SCIs) of European sites requiring assessment. QIs are the habitat features and species listed in Annexes I and II of the Habitats Directive for which each European Site has been designated and afforded protection. SCIs are wetland habitats and bird species listed within Annexes I and II of the Birds Directive. It is also vital that the threats to the ecological / environmental conditions that are required to support QIs and SCIs are considered as part of the assessment.

Site-Specific Conservation Objectives (SSCOs) have been designed to define favourable conservation status for a particular habitat or species at that site. According to the European Commission interpretation document ‘Managing Natura 2000 sites: The provisions of Article 6 of the Habitats Directive 92/43/EEC’, paragraph 4.6(3) states:

“The integrity of a site involves its ecological functions. The decision as to whether it is adversely affected should focus on and be limited to the site's conservation objectives.”

Favourable conservation status of a habitat is achieved when:

- Its natural range, and area it covers within that range, are stable or increasing;
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future; and
- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when:

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats;
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future; and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

3.2 Identification of relevant European Sites

This section of the screening process describes the European sites which exist within the Zone of Influence (ZOI) of the site. The Department of the Environment (2010 revised) Guidance on AA recommends a 15 km buffer zone to be considered for Natura 2000 sites, but projects

are evaluated on a case-by-case basis. A review of all sites within the ZOI has allowed a determination to be made that, in the absence of significant hydrological links, the characteristics of the proposed works will not impose effects beyond the 15 km ZOI. The Bennetstown Stream located at the site boundary flows into the Tolka River which flows into the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024) located greater than 18km downstream. However, given the distance and scale of the project this hydrologic link has been excluded from further assessment.

European sites that occur within 15 km of the proposed works are listed in Table 3.1 and illustrated in Figures 3.1, 3.2, and 3.3. Details on the specific QIs and SCIs of each European Site are also identified in Table 3.1 as well as site-specific threats and vulnerabilities of each of the sites (Table 3.2).

To determine the potential for effects from the proposed works, information on the qualifying features, known vulnerabilities, and threats to site integrity pertaining to any potentially affected European sites was reviewed. Background information on threats to individual sites and vulnerability of habitats and species that was used during this assessment included the following:

- Ireland's Article 17 Report to the European Commission "*Status of EU Protected Habitats and Species in Ireland*" (NPWS, 2019);
- Site Synopses (NPWS 2019a); and
- Natura 2000 Standard Data Forms (NPWS 2019b).

The assessment takes consideration of the SSCOs of each of the sites within the ZOI. Since the conservation objectives for the European sites focus on maintaining the favourable conservation condition of the QIs/SCIs of each site, the screening process focused on assessing the potential effects of the proposed works against the QIs/SCIs of each site. The conservation objectives for each site were consulted throughout the assessment process.

- Conservation objectives that have been considered by the assessment are included in the following NPWS documents:
 - Conservation Objectives for Rye Water Valley/Carton SAC [001398]. Version 1.0 - National Parks and Wildlife Service, Department of Housing, Local Government and Heritage (December 2021).

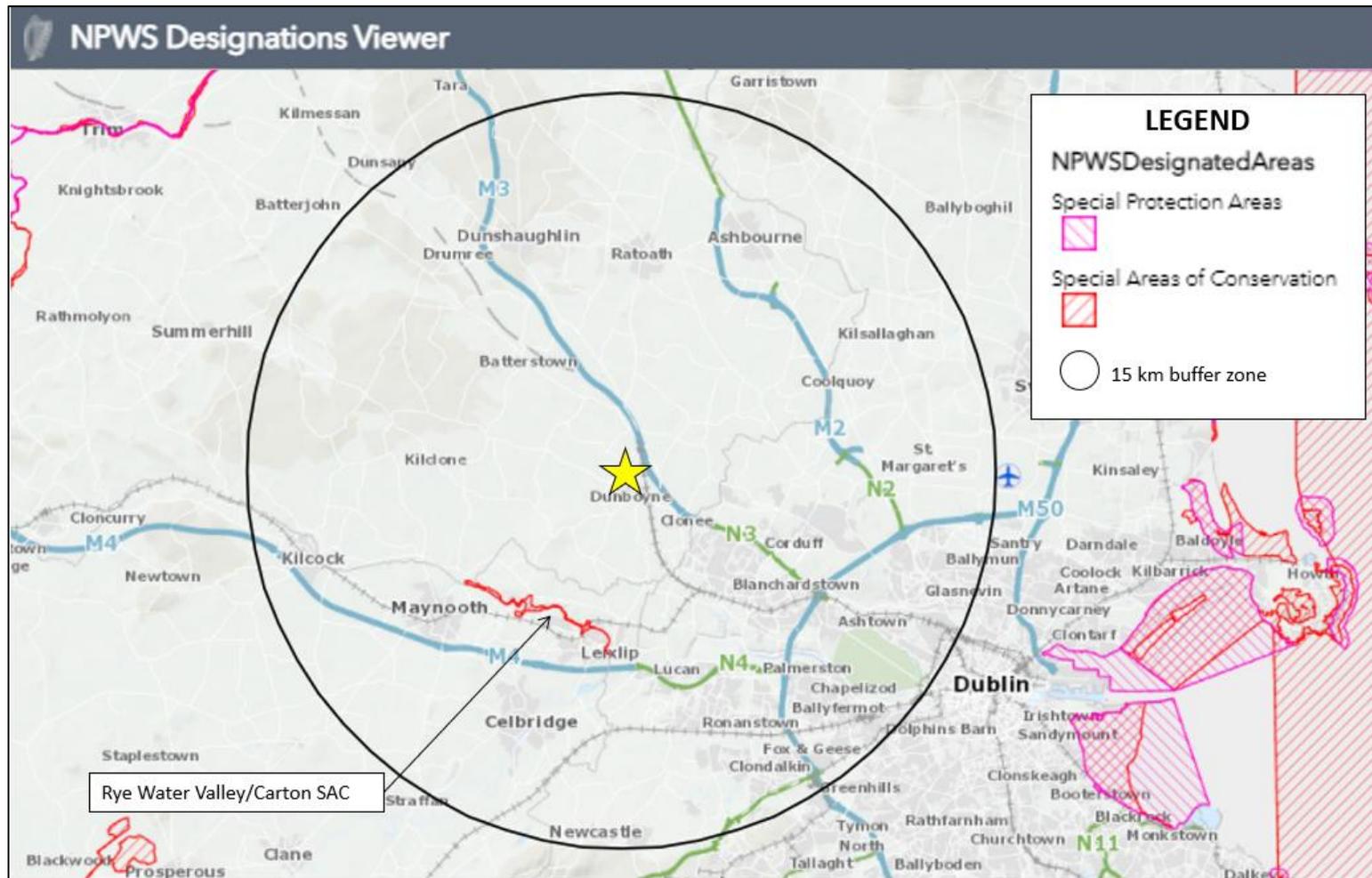


Figure 3.1: Designated Sites within 15km radius of the site (approximate site location indicated by the yellow star) (Source: NPWS, 2022).

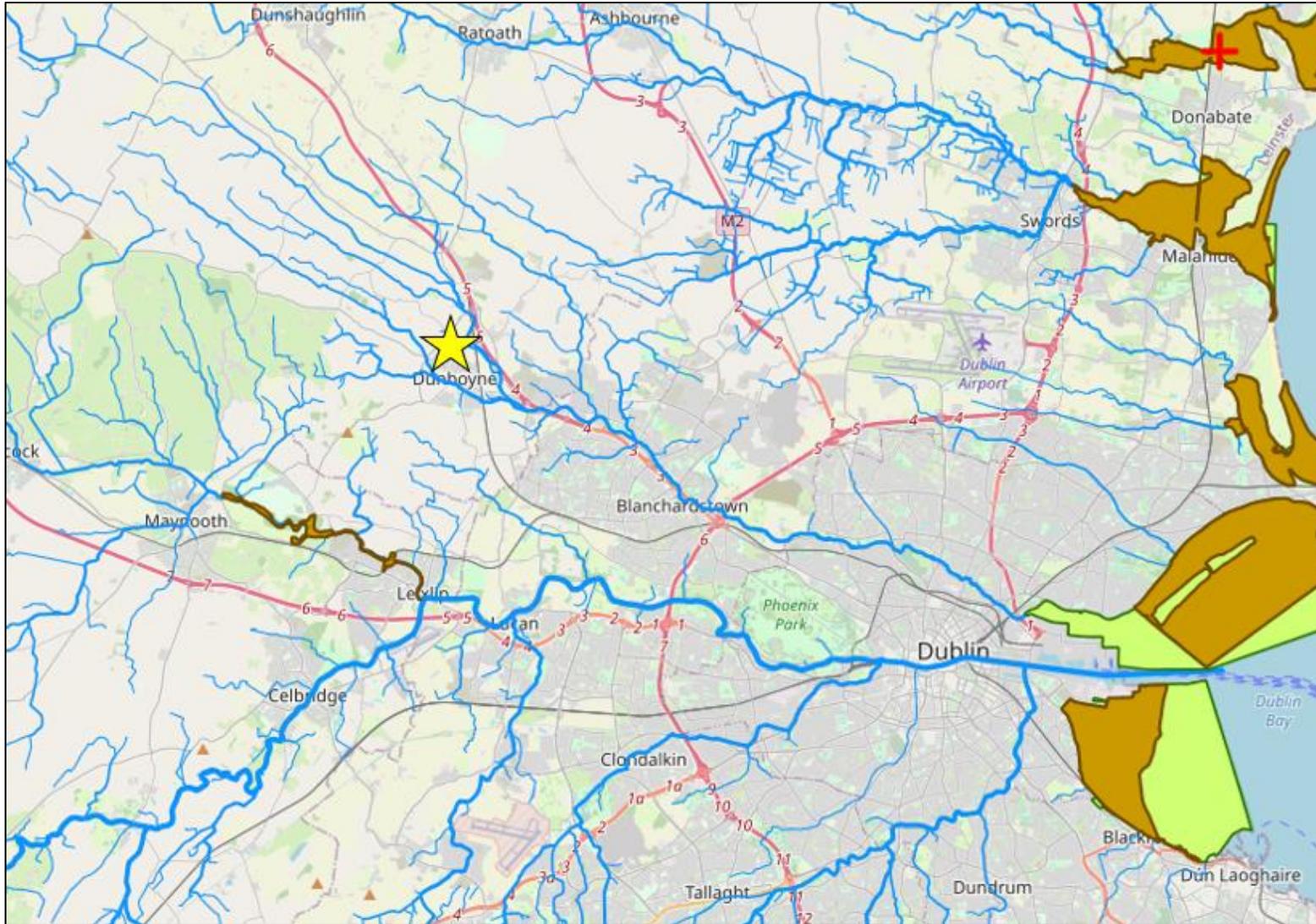


Figure 3.2: European Sites and EPA Rivers (approximate site location indicated by the yellow star). (Source: EPA, 2022).

Table 3.1 European Sites within 15 kilometres (ZOI) to the proposed site.

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Site Synopsis and Existing threats or Sensitivities
001398	Rye Water Valley/Carnton SAC	6.1 SW	[7220] Petrifying Springs [1014] Narrow-mouthed Whorl Snail (<i>Vertigo angustior</i>) [1016] Desmoulin's Whorl Snail (<i>Vertigo moulinsiana</i>)	<p>The Rye Water in Carton Estate is dammed at intervals, creating a series of lakes. Reed Sweet-grass (<i>Glyceria maxima</i>) is frequent around the lakes, along with Yellow Iris (<i>Iris pseudacorus</i>), Reed Canary-grass (<i>Phalaris arundinacea</i>), Bulrush (<i>Typha latifolia</i>), Water Forget-me-not (<i>Myosotis scorpioides</i>), Marsh-marigold (<i>Caltha palustris</i>), and starworts (<i>Callitriche</i> spp.). Along the remainder of the site the river has been dredged and much of the reed fringe removed.</p> <p>Hairy St. John's-wort (<i>Hypericum hirsutum</i>), a species legally protected under the Flora (Protection) Order, 1999, occurs in Carton Estate, and there is an old record from the estate for the similarly protected Hairy Violet (<i>Viola hirta</i>). However, this latter species has not been recorded from the site in recent years.</p> <p>Within the woods, Blackcap, Woodcock, and Long-eared Owl have been recorded. Little Grebe, Coot, Moorhen, Tufted Duck, Teal, and Kingfisher, the latter a species listed on Annex I of the E.U. Birds Directive, occur on and about the lake.</p> <p>The Rye Water is also a spawning ground for Trout and Salmon, and the rare Whiteclawed Crayfish (<i>Austropotamobius pallipes</i>) has been recorded at Leixlip. The latter two species are listed on Annex II of the E.U. Habitats Directive. The rare Narrowmouthed Whorl Snail and Desmoulin's Whorl Snail occur in marsh vegetation near Louisa Bridge.</p> <p>The conservation importance of the site lies in the presence of several rare and threatened plant and animal species and the presence of petrifying springs, a habitat type listed on Annex I of the E.U. Habitats Directive. The woods found on Carton Estate and their birdlife are of additional interest.</p>

3.3 Assessment Criteria

3.3.1 Exclusion from Appropriate Assessment

As set out in the provisions of the Habitats Directive, plans or projects that are directly connected with or necessary to the management of a European Site do not require AA. For this exception to apply, management is required to be interpreted narrowly as nature conservation management in the sense of Article 6(1) of the Habitats Directive. This refers to specific measures to address the ecological requirements of annexed habitats and species (and their habitats) present on a site(s). The relationship should be shown to be direct and not a by-product of the plan, even if this might result in positive or beneficial effects for a site(s).

In this case, however, the proposed link road between Dunboyne Business Park and the R157, is neither necessary for, nor directly connected with the management of a European Site. As such, the development cannot be excluded from AA.

3.3.2 Elements of the Works with the Potential to Give Risk of Effects

The construction and operational phases of the proposed link road have the potential to introduce effects such as indirect disturbance due to noise/vibrations, surface water contamination. These effects are examined in detail in subsequent sections of this report in relation to the sensitive receptors of the European site identified with regard to the conservation objectives and the potential pathways for effects.

3.3.3 Identification of Potential Effects and Screening of Sites

This section documents the final stage of the screening process. It uses the information collected on the sensitivity of the European Site and describes any potential effects to the integrity of the European site resulting from the proposed works. This assumes the absence of any controls, conditions, or mitigation measures. In determining the potential for effects, a number of factors have been taken into account. Firstly, the sensitivity and reported threats to the European Site and secondly, the individual elements of the proposed works and the potential effect they may cause to the site.

Sites can be screened out based on one or a combination of the following criteria:

- Where it can be shown that there are no significant pathways such as hydrological links between activities of the proposed works, and the site to be screened;
- Where the site is located at such a distance from proposed works that effects are not foreseen; and/or
- Where it is that known threats or vulnerabilities at a site cannot be linked to potential impacts that may arise from the proposed works.

3.4 Assessment of Significance of Potential Effects

Assessment is the process of evaluating the importance or significance of project/plan effects (whether negative or positive). The following parameters are described when characterising impacts (following guidance from the Chartered Institute of Ecology and Environmental Management, Environmental Protection Agency and National Roads Authority):

Direct and Indirect Impacts – An impact can be caused either as a direct or as an indirect consequence of a proposed development;

Magnitude - Magnitude refers to size, amount, intensity, and volume. It should be quantified if possible and expressed in absolute or relative terms (e.g. the amount of habitat lost, percentage change to habitat area, percentage decline in a species population). Magnitude measures the size of an impact, which is described as high, medium, low, very low, or negligible.

Extent - The extent is the spatial or geographical area over which the impact/effect may occur under a suitably representative range of conditions (e.g. noise transmission under water);

Duration - The time for which the effect is expected to last prior to recovery or replacement of the resource or feature.

- Temporary: up to 1 Year;
- Short Term: the effects would take 1-7 years to be mitigated;
- Medium Term: the effects would take 7-15 years to be mitigated;
- Long Term: the effects would take 15-60 years to be mitigated; and
- Permanent: the effects would take 60+ years to be mitigated.

Likelihood – The probability of an impact/effect occurring. The probability of the effect occurring taking into account all available information.

- Certain/Near Certain: >95% chance of occurring as predicted;
- Probable: 50-95% chance as occurring as predicted;
- Unlikely: 5-50% chance as occurring as predicted; and
- Extremely Unlikely: <5% chance as occurring as predicted.

EC identified in 'Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC, European Commission Environment DG, 2001' outlines the types of effects that may affect European sites. These include effects from the following activities:

- Land take
- Resource requirements (drinking water abstraction, etc.)
- Emissions (disposal to land, water, or air)
- Excavation requirements
- Transportation requirements
- Duration of construction, operation, decommissioning

In addition, the guidance outlines the following likely changes that may occur at a designated site, which may result in effects on the integrity and function of that site:

- Reduction of habitat area
- Disturbance to key species

- Habitat or species fragmentation
- Reduction in species density
- Changes in key indicators of conservation value (water quality, etc.)
- Climate change

The elements detailed above were considered with specific reference to the European site identified within a 15km radius.

3.4.1 Land Take/Habitat Loss

The proposed development will see a minor land take with the construction of the new link road. Since the nearest European Site or qualifying habitat feature is at a distance of 6.1km from the site (i.e. Rye Water Valley/Carton SAC), there will be no effects posed to European sites in this respect.

3.4.2 Resource Requirements

There are no resource requirements (i.e. mineral/drinking water abstractions, etc.) for the proposed development which will be additional to existing requirements. Therefore, there will be no interactions with resources necessary for the maintenance of the ecological integrity of any European sites.

3.4.3 Duration of Works

The construction phase of the proposed works is anticipated to short term in nature and, therefore, will not have a significant impact on European sites.

3.4.4 Emissions (Disposal to Land, Water or Air)

Construction Phase:

A new surface water drainage system will be required for the project and will connect to existing filter drain on the R157 and to a closed system (pipe and gulleys) within the business park. The surface water drainage will be designed in accordance with all best practice requirements, including design in accordance with the Greater Dublin Strategic Drainage Study and CIRIA C753 The SuDS Manual. The surface water design should be carried out so that all rainfall runoff is restricted to a maximum that is equal to or less than the natural greenfield runoff equivalent and that an oil water interceptor is located prior to discharge.

Construction phase elements of the plan may give rise to increased temporary site effects such as noise or contamination due to dust. Bennetstown stream, which is a tributary of the Tolka River (IE_EA_09T010600), is located directly at the site boundary as shown by Figure 2.3. Bennetstown stream (Segment code 09_385) flows into Naulwood (Segment Code 09_1422) which in turn flows into the Tolka River (IE_EA_09T010600) and ultimately into the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024) located greater than 18km downstream. However, given the distance and scale of the project this hydrologic link has been excluded from further assessment. No construction discharge will occur during the development. Therefore, given the lack of connectivity between the site and the river and the

distance between the closest European site and the proposed development, these effects are determined to be negligible.

Operational Phase:

The proposed development works at the site will consist of a road, a link road that shall be approximately 340m in length and a new access road that shall be approximately 50m in length, connecting Dunboyne Business Park and the R157 and will include junctions, footpaths, bus stops, public lighting, accommodation and fencing/boundary works, landscaping works, drainage/attenuation works, and ancillary infrastructure and utility works.. No significant operational phase impacts of the proposed link road works are anticipated. There is no potential for impacts to affect any Natura 2000 sites during the operational phase.

3.4.5 Excavation Requirements/ Erosion/Sedimentation

The proposed development will require some excavation works with the associated risk of erosion and sedimentation. However, these works will be setback from any hydrological receptor with no instream works proposed. Therefore, as a result of the distance from the proposed link road to the surface water feature (Bennetstown stream) and distance directly to any Natura 2000 sites, there will be no effects posed to European sites from excavation works.

3.4.6 Transportation Requirements

There will be a minor temporary increase in traffic during the construction phase. However, these effects are considered to be negligible with regard to European sites due to the relatively small-scale nature of the works, the distances observed, and the indirect pathways for effects.

3.4.7 Duration of Construction, Operation, Decommissioning

The proposed project construction duration is short-term and will have no effects on European sites given the small-scale nature of the works, the distance from the proposed works to any European sites, and the indirect pathways identified.

3.4.8 Habitat Reduction

There are no supporting habitats identified within the site footprint for any Annex I or Annex II species, and the nearest European site or qualifying habitat feature is located 6.1km from the site. As such, there will be no reduction of habitat of European sites resulting from the proposed development.

3.4.9 Species Disturbance

There are no pathways for disturbance effects identified due to the distance between the proposed development and the nearest European site.

3.4.10 Habitat or Species Fragmentation

Given the scale, timeline, and distance from the European sites, the proposal is considered to have no potential effects on any European site in this regard.

3.4.11 Changes in Key indicators of Conservation Value

The nearest European site is 6.1km away from the proposed construction. Bennetstown stream, which is a tributary of the Tolka River (IE_EA_09T010600), is located directly adjacent to the site boundary as shown by Figure 2.3. Bennetstown stream (Segment code 09_385) flows into Naulswood (Segment Code 09_1422) which in turn flows into the Tolka River (IE_EA_09T010600). However, these works will be setback from any hydrological receptor with no instream works proposed. Therefore, given the scale and timeline of the development, combined with the distance and indirect pathways to European sites, effects arising from these works will be negligible.

3.4.12 Climate Change

Due to the nature and scale of the proposed work, its effects of the proposed development on climate and Ireland's obligations under the Kyoto Protocol are not anticipated to be significant.

Table 3.2 Screening assessment of the potential effects arising from the proposed works

Site Code	Site Name	Distance (km)	Sensitive Receptors (Qualifying Interest & Special Conservation Interests) [including the relevant code for the qualifying feature]	Characterisation of Potential Effects	Potential Significant Effects	Potential In-combination Effects
001398	Rye Water Valley/Cartron SAC	6.1 SW	[7220] Petrifying Springs [1014] Narrow-mouthed Whorl Snail (Vertigo angustior) [1016] Desmoulin's Whorl Snail (Vertigo moulinsiana)	Threats to the site include: A10.01 removal of hedges and copses or scrub, A04 grazing, B Sylviculture, forestry, A08 Fertilisation, E01.01 continuous urbanisation, D01.02 roads, motorways, J02.05.02 modifying structures of inland water courses, E01.03 dispersed habitation. There are no sources for effect to the terrestrial habitats of the SAC. There is no direct hydrological link between the site and the protected area. Construction phase effects such as dust are known to persist over a short distance (less than 250 meters); all other effects from the sites are identified to be localised.	No	No

4 SUMMARY & CONCLUSION

4.1 Summary

The Habitats Directive provides legal protection for habitats and species of European importance. This AA screening is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted.

This Appropriate Assessment (AA) Screening report is prepared to assess the proposed road which will connect Dunboyne Business Park and the R157 in Dunboyne. No construction discharge will occur during the development.

Bennetstown stream, which is a tributary of the Tolka River (IE_EA_09T010600), is located directly adjacent to the site boundary as shown by Figure 2.3. Bennetstown stream (Segment code 09_385) flows into Naulswood (Segment Code 09_1422) which in turn flows into the Tolka River (IE_EA_09T010600) and ultimately into the South Dublin Bay and River Tolka Estuary SPA (Site Code 004024) located greater than 18km downstream. However, given the distance and scale of the project this hydrologic link has been excluded from further assessment.

The nearest European site is located approximately 6.1km southwest of the site with no direct hydrologic link.

There is no overlap or direct link from the proposed development to the European site and, given the scale of the development and distance from the proposed works to the European site, the effects arising from these works will be negligible.

There will be no:

- reduction in habitat area
- disturbance to key species
- habitat or species fragmentation
- reduction in species density
- changes in key indicator of conservation value
- climate change

4.2 Conclusion

This stage 1 screening for AA of the proposed link and access road between Dunboyne Business Park and the R157 including junctions, footpaths, bus stops, public lighting, accommodation and fencing/boundary works, landscaping works, drainage/attenuation works, and ancillary infrastructure and utility works .shows that implementation of the proposed project is not foreseen to have any likely significant effects on any European site.

The nearest European site or qualifying habitat features is located 6.1 kilometres from the site. The AA screening process has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the project.

Through an assessment of the pathways for effects and an evaluation of the project characteristics, taking account of the processes involved and the distance of separation from European sites, it has been evaluated that there are no likely significant adverse effects on the qualifying interests, special conservation interest, or the conservation objectives of any designated European site. The ecological integrity of the European sites is not foreseen to be significantly affected by the project.

Given the nature of the development, its scale, and the existing localised and temporary nature of the construction effects identified as potential sources, the proposed development will not lead to a significant in-combination effect with any other plans or projects.

It is concluded that the project is not foreseen to give rise to any significant adverse effects on any designated European sites, alone or in combination with other plans or projects. This evaluation is made in view of the conservation objectives of the habitats or species for which these sites have been designated. Consequently, a Stage Two is not required for the project.